

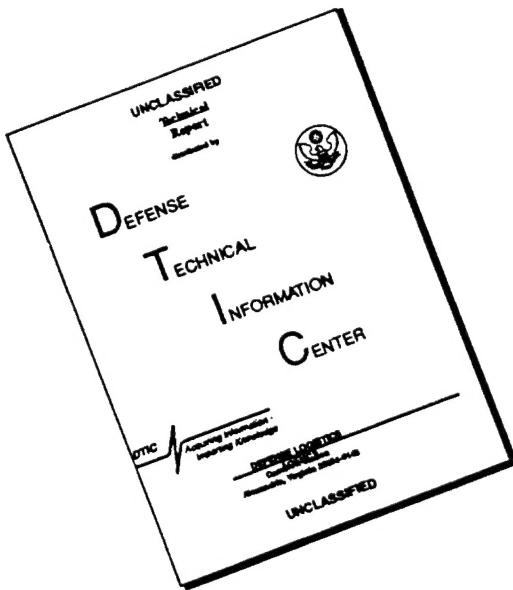
REPORT DOCUMENTATION PAGE

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6. AUTHOR(S) K. Reynolds, J. Pollard, J. Cunero, J. Knapik, B. Jones			
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13. ABSTRACT (Maximum 200 words) Major objectives of Army infantry training are development of endurance and load carriage ability. These objectives are achieved by frequent running and road marching. Height, weight, % body fat, and physical fitness were measured and information about training and past injuries were obtained by questionnaire. Incidence of new injuries was documented by a periodic review of medical records of all subjects. Mean age of subjects was 19.1 years, height 69.1 in, weight 162.9 lbs, % body fat 14.7%. Over the observed period 29% suffered one or more lower extremity training injuries. Trends of significantly increased risk of injury with increased frequency of running and marching were observed. FREQUENCY (days/wk) 1 or LESS 2 - 3 4 or MORE p-value RUNNING RISK (%) 0.0 26.6 32.7 0.01 MARCHING RISK (%) 6.3 20.8 32.4 0.03 Those soldiers who had no past injury causing loss of school or work time were at lower risk of current injury (25.6%) than those injured in the last 2 yrs (44.3%, p=0.04). These data suggest that more frequent weight-bearing training and recent (truncated after 200 words)			
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17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UL

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SGRD-UE- OPP (360-5j)

13 November 1990

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*pt
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SUBJECT: Request for Clearance of Technical Paper (USARIEM)

1. Reference AR 360-5, request clearance of enclosed manuscript, abstract, presentation, technical report, review article. Report Documentation Page, DD Form 1473 (is) (is not) enclosed.

Title Frequency of Training, and Past Injuries as Risk Factors for Injuries in Infantry Soldiers

Author(s) K.Reynolds, J.Pollard, J.Cunero, J.Knapik, B.Jones

Intended for publication in Proceeding of the annual meeting of the American College of Sports Medicine (ACSM)

Intended for presentation before ACSM

Location Orlando, FL

Date May 91

2. Budget Project No. _____ Cost Code _____ WU: 134

3. Enclosed contains no classified material. It meets accepted standards for scientific accuracy and propriety. It contains no potentially sensitive or controversial items.

Bruce H. Jones

BRUCE H. JONES

LTC, MC

Chief, Occupational Medicine Division

Encl

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Commander, USARIEM

THRU Resource Management Branch

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for Gerald P. Krueger, Col, MS
GERALD P. KRUEGER
Colonel, MS
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FREQUENCY OF TRAINING, AND PAST INJURIES AS RISK
FACTORS FOR INJURIES IN INFANTRY SOLDIERS

K Reynolds, J Pollard, J Cunero, J Knapik, B
Jones. U.S. Army Research Institute of
Environmental Medicine, Natick, MA 01760

Major objectives of Army infantry training are development of endurance and load carriage ability. These objectives are achieved by frequent running and road marching. Height, weight, % body fat, and physical fitness were measured and information about training and past injuries were obtained by questionnaire. Incidence of new injuries was documented by a periodic review of medical records of all subjects. Mean age of subjects was 19.1 years, height 69.1 in, weight 162.9 lbs, % body fat 14.7%. Over the observed period 29% suffered one or more lower extremity training injuries. Trends of significantly increased risk of injury with increased frequency of running and marching were observed.

<u>FREQUENCY (days/wk)</u>	<u>1 or LESS</u>	<u>2 - 3</u>	<u>4 or MORE</u>	<u>p-value</u>
RUNNING RISK (%)	0.0	26.6	32.7	0.01
MARCHING RISK (%)	6.3	20.8	32.4	0.03

Those soldiers who had no past injury causing loss of school or work time were at lower risk of current injury (25.6%) than those injured in the last 2 yrs (44.3%, p = 0.04). These data suggest that more frequent weight-bearing training and recent injuries predispose infantry soldiers to future injury.